

FCA US LLC

Application for Certification
Part 1

2017 Model Year

Durability Group: HCRXGPGNNF27
Evaporative Familie(s): HCRXR0116PK1

Test Group: HCRXT03.25P1

Four Stroke, Otto Cycle, Gasoline Fueled, Ported F I

Ceramic Monolith Pd/Rh Close Coupled Catalysts

3.2 Liter V-6

LDT2

Applicable Standards:

50 State – BIN 110

CALIFORNIA CLEANEST VEHICLE (CCV)

Vehicles Covered:

Jeep Cherokee FWD

Jeep Cherokee 4X4

Vehicles Run:

VID1 config., Vehicle ID V6KLJ4885 (Exhaust)

VID 2 config., Vehicle ID K2PFD4647 (Evap)

For Questions, Ellis D. Jefferson, 248.576.5463 Steven Mazure 248. 576.5471
All testing completed – Unconditional Cert request

FCA US LLC

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FCA US LLC

Section 1 Correspondence and Communication

For questions dealing with the Part I application for this Test Group contact:

Name	Title	Responsibility	Phone	E-mail	Fax
Ellis D. Jefferson	Certification Engineer	Application Submission	248.576.5463	ellis.jefferson @ fcagroup.com	248.576.7928
Steven R. Mazure	Manager - Certification Team	Certification Programs	248.576.5471	steve.mazure @ fcagroup.com	248.576.7928

For a complete listing of all Correspondence and Communication Information for FCA US LLC, please see:

"Common Section Book - Section 1 Correspondence and Communication "

Section 2 Durability Group Description

Durability Group Name: HCRXGPGNNF27

For a complete description of the Durability Group Description please see:

"Common Section Book - Section 2. Durability Group Description"

Section 3 Evaporative/Refueling Family Description

Evaporative/Refueling Family Name(s): HCRXR0116PK1

For a complete description of the Evaporative/Refueling Family Description please see:

"Common Section Book - Section 3. Evaporative/Refueling Family Description "

For ORVR Agency Review Sign Off please see:

"Common Section Book - Section 16. Agency Approvals "

FCA US LLC

Section 4 Durability Procedure Description

Durability Group: HCRXGPGNNF27

Durability Provision Statement:

Based on FCA US LLC's good engineering judgement, all the vehicles described in this Application for Certification comply with all applicable intermediate and full useful life standards.

For a complete description of the Durability Procedure please see:

"Common Section Book-Section 16. Durability Procedure Description"

Indicate if aged components were used.

Aged Components were used

Indicate whether additive or multiplicative DF's were used.

N/A

List all DF's calculated at both full and intermediate useful life and applicable standards (test results and vehicle description).

EPA - Reference VERIFY (hard copies of all VERIFY Reports retained in-house)
CARB - Reference Cert Review Sheet

Evaporative/Refueling Family: HCRXR0116PK1

For a complete description of the Durability Procedure please see:

"Common Section Book - Section 16. Durability Procedure Description "

Indicate if aged components were used.

Yes - Bench Aging

Indicate whether additive or multiplicative DF's were used.

Additive

List all DF's calculated at both full and intermediate useful life and applicable standards (test results and vehicle description).

EPA - Reference VERIFY (hard copies of all VERIFY Reports retained in-house)
CARB - Reference Cert Review Sheet

Section 5 Test Group Description

Test Group Name: HCRXT03.25P1
Engine displacements covered: 3.2 Liter
Arrangement and number of cylinders: V-6
Vehicle classes covered: LDT2
Emission standards class: BIN 110 (CCV),
AB71 Qualified Vehicles: No

FCA US LLC

Section 8 Emission testing Waiver Statements

Below is a list clearly identifying the standards applicable to this Test Group for which emission testing was not performed. All FCA US LLC applicable vehicles will conform with the emission standards which emission data is not being provided, as allowed under 40 CFR 86.1829-01 or 86.1810-01.

IM/ASM	HCHO	NMOG
CST	Particulates	

Section 9 OBD Description

For a complete description of the OBD Description please see: "Common Part 1 Section 16. OBD Description"

For OBD Agency Approvals please see: "Common Part 1 Section 16. Agency Approvals"

OBD Demonstration Compliance Statement: This Test Group meets the full intent of both the Clean Air Act as amended in 1990, section 202(m), and the applicable federal OBD regulations contained in 40 CFR §86.005-17 and 40 CFR §86.1806-01, including a reference to those provisions pertaining to deficiencies in the limited instances where an OBD II system that complies with 1968.2 does not comply with all the requirements of section 1968.1.

Section 10 Description of Alternate - Fueled Vehicles

Not applicable to this test group.

FCA US LLC**Test Group - HCRXT03.25P1**

EPA COMP CODE	AA-100	AA-200	AA-300	AA-400
E10:Powertrain Control Module				
E11:Transmission Control Module				
E17:ABS Control Module				
F03:Plastic Fuel Tank (Partial)				
F04:Plastic Fuel Tank Assembly				
F05:Fuel Pump				
F10:Fuel Level Sending Unit				
F16:Fuel Tank Filler Cap				
F29:Fuel Tank Pressure Sensor				
F36:Fuel Filler Receptacle				
F40:Throttle Body				
F50:Fuel Injector				
F55:Fuel Pressure Regulator				
F64:Fuel Pump Module				
F70:Evap. Canister Assembly				
F73:ORVR Control Valve				
F79:ESIM (Evaporative System Integrity Monitor)				

EPA COMP CODE	AA-100	AA-200	AA-300	AA-400
H08:Exhaust Manifold Catalytic Converter				
I05:Spark Plug				
L01:Heated Oxygen Sensor				
L13:Accelerator Pedal Assembly				
L15:Camshaft Position Sensor				
L16:Crankshaft Position Sensor				
L20:Knock Sensor				
L25:Vehicle Speed Sensor				
M01:Engine Coolant Temp. Sensor				
M04:Intake Air Temperature Sensor				
M07:Oil Temperature Sensor				
M10:Ambient Temperature Sensor				
N24:Oil Pressure Sensor				
N50:Engine Thermostat				
R10:Transmission Oil Cooler				
T27:Transmission Pressure Sensor				
T53:Transmission Range Sensor				
V01:PCV Valve				
V05:MAP Sensor				
V63:Evap. Can. Purge Solenoid				

EPA COMP CODE	AA-100	AA-200	AA-300	AA-400
Z01:VECI Label				

Section11-100 Engine Parts List

FCA US LLC

Test Group :HCRXT03.25P1

Durability Group: HCRXGPGNNF27 Standard Fed: Bin110 Cal: N/A

Trans. Code	Sales Code	Transfer Case Sales Code/Drive Code	No. of Gears	Over Drive Gear Ratio	Drive Gear Ratio	Engine Sales Code	Torque Code	Torque Size	Conv Clutch Control Type Calib/Special Features
L9	DFH	2F	9	0.479	4.7,2.842,1.909,1.382,1.0,0.808,0.699,0.58,0.479	EHK	UC	242MM	Electronically shifted data on file
L9	DFH	DK2 / 4F	9	0.479	4.7,2.842,1.909,1.382,1.0,0.808,0.699,0.58,0.479	EHK	UC	242MM	Electronically shifted data on file
L9	DFJ	DK4 / 4P	9	0.479	4.7,2.842,1.909,1.382,1.0,0.808,0.699,0.58,0.479	EHK	UC	242MM	Electronically shifted data on file

Section12-200 Transmission

FCA US LLC

HCRXT03.25P1

Durability Group:
HCRXGPGNNF27

Standard Fed: Bin110 Cal: N/A

Asterisk (*) Indicates Manufacturer has elected to certify at this higher test weight class as allowed by CFR 86.1831-01

Engine Code AA-100 Eng Displ: 3.2L (EHK) Evap Family - Evap Code: HCRXR0116PK1-15.8

Model	Carline Name	Model Qualifier	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
KLTA74	Jeep: Cherokee FWD			L9 - FWD DFH	UC	5500	4000 2284 3806		1.56 1.56	19.6 19.3	225/60R17 TRA 225/55R18 TWL	TZF TZC	ZB783Q 304002	18.66 17.85	13.3 13.9	21.10000 25.56000	0.41740 0.41320	0.02306 0.02314	23.21000 28.12000	0.45910 0.45450	0.02537 0.02545

Engine Code AA-200 Eng Displ: 3.2L (EHK) Evap Family - Evap Code: HCRXR0116PK1-15.8

Model	Carline Name	Model Qualifier	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
KLJA74	Jeep: Cherokee 4X4			L9 - AWD DFH / DK2-4F	UC	5500	4250 2339 4074		1.56 1.56 1.68 1.68	19.1 18.7 20.5 20.1	225/65R17 TRF 225/60R18 TWS 225/65R17 TRF 225/60R18 TWS	TZF TZC TZF TZC	ZB788Q 303856 ZB788Q 303856	18.55 18.20 18.55 18.20	14.2 14.5 14.2 14.5	26.84000 28.52000 26.84000 28.52000	0.45690 0.47600 0.45690 0.47600	0.02269 0.02245 0.02269 0.02245	29.52000 31.37000 29.52000 31.37000	0.50260 0.52360 0.50260 0.52360	0.02496 0.02470 0.02496 0.02470

Engine Code AA-300 Eng Displ: 3.2L (EHK) Evap Family - Evap Code: HCRXR0116PK1-15.8

Model	Carline Name	Model Qualifier	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
KLJA74	Jeep: Cherokee 4x4 Active Drive II	AD2		L9 - AWD DFJ / DK4-4P	UC	5500	4500 2372 4139		1.68 1.68 1.68	20.5 20.1 20	225/65R17 TRF 225/60R18 TWS P245/65R17 TCF	TZF TZC TZF	ZB788Q 303856 05079Q	18.27 17.95 16.44	15.3 15.5 16.9	38.13000 39.80000 38.50000	0.03180 0.05100 0.29890	0.02987 0.02962 0.02945	41.94000 43.78000 42.35000	0.03500 0.05610 0.32880	0.03286 0.03258 0.03240

Engine Code AA-400 Eng Displ: 3.2L (EHK) Evap Family - Evap Code: HCRXR0116PK1-15.8

Model	Carline Name	Model Qualifier	Opt	Trans. / Tr. Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
KLJA74	Jeep: Cherokee Trailhawk 4X4	TH		L9 - AWD DFJ / DK4-4P	UC	5500	4500 2372 4139		1.68 1.68 1.68	20.5 20.1 20	225/65R17 TRF 225/60R18 TWS P245/65R17 TCF	TZF TZC TZF	ZB788Q 303856 05079Q	18.27 17.95 16.44	15.3 15.5 16.9	38.13000 39.80000 38.50000	0.03180 0.05100 0.29890	0.02987 0.02962 0.02945	41.94000 43.78000 42.35000	0.03500 0.05610 0.32880	0.03286 0.03258 0.03240

Section12-300 Vehicle

FCA US LLC

Test Group: HCRXT03.25P1 - Engine Code Index

Durability Group: Standard : Bin110 / NA Vehicle Class: LDT2 (LVW 3751-5750, GVW 0-6000) / NA
HCRXGPGNNF27

Engine Code: AA-100 - 3.2L KL fwd, A9 DFH trans, (CCV)

Engine Code	RC #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max.	Drive Code	Sales Areas
AA-100	Original		3.2L/EHK	KL		L9/ Automatic L9 - Lockup/Automatic/9-speed	5500	5500	4000	4000	FWD	NAS

Engine Code: AA-200 - 3.2L KL awd, A9 DFH trans (CCV), 1spd PTU

Engine Code	RC #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max.	Drive Code	Sales Areas
AA-200	Original		3.2L/EHK	KL		L9/ Automatic L9 - Lockup/Automatic/9-speed	5500	5500	4250	4250	AWD	NAS

Engine Code: AA-300 - 3.2L KL 4wd, A9 DFJ trans, (CCV), 2spd PTU

Engine Code	RC #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max.	Drive Code	Sales Areas
AA-300	Original		3.2L/EHK	KL		L9/ Automatic L9 - Lockup/Automatic/9-speed	5500	5500	4500	4500	AWD	NAS

Engine Code: AA-400 - 3.2L KL 4wd, A9 DFJ trans, (CCV), trailhaw2spd PTU

Engine Code	RC #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max.	Drive Code	Sales Areas
AA-400	Original		3.2L/EHK	KL	TH	L9/ Automatic L9 - Lockup/Automatic/9-speed	5500	5500	4500	4500	AWD	NAS

Test Group: HCRXT03.25P1 - No Engine Code Changes**Durability Group: HCRXGPGNNF27 Standard Fed: Bin110 Cal: N/A**

RC #	Submission Date	Description
No Results Found		

Section12-500 Engine Code Index

FCA US LLC

Vehicle Parameters

Valves per cylinder Engine
All 3.2L - 4

Test Parameters

SIL usage: See shift schedule table

Cooling fan configuration: Models
All - One fan center front

Addition Cooling: Models
All - None

Evaporative Testing Parameters: Models
KL - 116 grams

Fuel temperature Profile: Models
All KL, vehicles – eKL

Special Test Procedure: Models
All - none



June 6, 2016

Mr. Joel Dalton
Vehicle Programs Group
Certification and Compliance Division
U.S. Environmental Protection Agency
2000 Traverwood Drive Ann Arbor, Michigan 48105

Dear Mr. Dalton:

Re: 2017 Model Year LDT Certificate of Conformity Request

FCA US LLC requests a 2017 Certificate of Conformity for the 50 State 3.2L test group **HCRXT03.25P1** with evaporative family HCRXR0116PK1. This test group is being certified to TIER 3, BIN 110 standards and qualifies as ULEV II under California Cleanest Vehicle (CCV) and MSAT standards. FCA US LLC agrees to meet the TIER 3, BIN 110 emission standards and the regulations applicable to such vehicles during the full useful lives of the vehicles in this test group. FCA US LLC agrees that the exhaust and evaporative emission standards listed below and in the application for certification apply to both certification and in-use vehicles according to the provisions of 40 CFR, Parts 86 and 88, as applicable.

FCA US LLC also elects to follow GHG path 86-1818(f)(1). The FTP emission standards for this PC/LDV test group are as follows:

<u>Emission Standards</u>		<u>NMOG +NOX</u>	<u>N2O</u>	<u>CO</u>	<u>CH4</u>	
Federal Tier 3 BIN 110	120K	0.110		0.010	2.1	0.030

<u>Evaporative Standards</u>		<u>3-Day</u>	<u>2-Day</u>	<u>R/L</u>	<u>ORVR</u>
HCRXR0116PK1	120K	0.65	0.85	0.05	0.20

Initial combined **CREE** for **HCRXT03.25P1** test group is : 336.7 g/m
The California Executive Order is A-009-1339 and models are as follows:

<u>Division</u>	<u>Model</u>
Jeep	Cherokee FWD/4X4

If there are any questions regarding this submission, please contact Ellis D. Jefferson at (248) 576-5463 or Steve R. Mazure at (248) 576-5471.

Sincerely,
FCA US LLC

Steve R. Mazure, Manager
Vehicle Certification
srm/edj

HCRXT03.25P1 Part 1 Section 14 - 001 (2017)



June 6, 2016

Ms. Annette Hebert, Chief
ECARS Division
Air Resource Board
9480 Telstar Ave, Suite 4,
El Monte, CA 91731

Dear Ms. Hebert:

Re: 2017 Model Year LDT Executive Order Request (#A-009-1339)

FCA US LLC requests a 2017 Executive Order for the 3.2L 50-State test group **HCRXT03.25P1** with evaporative family HCRXR0116PK1. This test group is being certified to TIER 3, BIN 110 and MSAT standards and qualifies as ULEV2 under California Cleanest Vehicle (CCV). FCA US LLC agrees to meet the TIER 3, BIN 110 standards applicable to such vehicles during the full useful lives of the vehicles in test group **HCRXT03.25P1**. FCA US LLC agrees that the exhaust and evaporative emission standards listed below and in the application for certification apply to both certification and in-use vehicles according to the provisions of 40 CFR, Parts 86 and 88, as applicable. **FCA US LLC also elects to follow GHG path 86-1818(f)(1).** The FTP emission standards for this PC/LDV test group are as follows:

<u>Emission Standards</u>		<u>NMOG + NOx</u>	<u>N2O</u>	<u>PM</u>	<u>CO</u>	<u>HCHO</u>	<u>CH4</u>
BIN 110	120K	0.110	0.010	0.003	2.1	0.004	0.030
<u>Evaporative Standards</u>		<u>3-Day</u>	<u>2-Day</u>	<u>R/L</u>	<u>ORVR</u>		
LEV II	150K	0.65	0.85	0.05	--		
	120K	--	--	--	0.20		

Initial combined **CREE** for **HCRXT03.25P1** test group is : 336.7 g/m

FCA US LLC attests that the test and production vehicles do not have defeat devices; that all AECDs have been declared and described in the Applications; and that test and production vehicles do not have alternate maps.

If there are any questions regarding this submission, please contact Ellis D. Jefferson at (248) 576-5463 or Steve R. Mazure at (248) 576-5471.

Sincerely,
FCA US LLC

Steve R. Mazure, Manager
Vehicle Certification
srm/edj

cc: L. Benedict

HCRXT03.25P1 Part 1 Section 14 - 002 (2017)

US EPA Fee Form

General Information

Date:	<input type="text" value="02/22/2016"/>
Process Code:	<input type="text" value="Submit New Filing Fee Form"/>
Manufacturer Code:	<input type="text" value="CRX"/>
Manufacturer Name:	<input type="text" value="FCA US LLC"/>

Manufacturer Contact

Name:	<input type="text" value="Kelli Myers"/>
Email Address:	<input type="text" value="kelli.myers@fcagroup.com"/>
Phone:	<input type="text" value="248-576-5457"/>
Calendar Year complete application submitted to EPA:	<input type="text" value="2016"/>
Engine Family / Evaporative Family / Test Group:	<input type="text" value="HCRXT03.25P1"/>

Certificate Request Type (Industry Sector Code)

- | | |
|--|---|
| <input checked="" type="radio"/> On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (Federal) (A, B, D, J, T, V) | <input type="radio"/> Nonroad CI (L) |
| <input type="radio"/> On-Highway HDE Dyno Cert (Federal) (E, H) | <input type="radio"/> Nonroad SI (B, S) |
| <input type="radio"/> On-Highway LD ICI, MDPV ICI, HDV ICI (A, B, D, J, T, V) | <input type="radio"/> Locomotive (G, K) |
| <input type="radio"/> On-Highway Motorcycle (C) | <input type="radio"/> All Nonroad Recreational, excluding Marine engines (X, Y) |
| <input type="radio"/> On-Highway HDV Evap (F) | <input type="radio"/> All Marine (Including IMO) (M, N, W) |
| <input type="radio"/> On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (California-Only) (A, B, D, J, T, V) | <input type="radio"/> Component Certification for Evaporative Emissions (P) |
| <input type="radio"/> On-Highway HDE Dyno Cert (California-Only) (E, H) | |

IMO Name (Required for dual US/IMO Marine Only):

ICI VIN Number (Required for ICIs Only):

Do you qualify for a Reduced Fee (RF)?

What is the total number of vehicles, engines, or units covered?:

What is the aggregate total retail value of the vehicles, engines or units covered?:

Payment Information

Amount Owed:	<input type="text" value="22,889.00"/>
Payment Type:	<input type="text" value="Offline Wire"/>

Comments:

Test Group GCRXV02.95P4 has been cancelled for 2015 CY / 2016 MY. As a result, Test Group GCRXV02.95P4 cert fee (\$26,741) has been transferred to Test Group HCRXV02.95P0.

There is a \$3,852 credit because of 2015 CY cert fee and 2016 CY cert fee being different amounts.

\$26,741 (2015 CY Fee) - \$22,889 (2016 CY Fee) = \$3,852 credit to be applied to HCRXT03.25P1.

FCA US LLC	VEHICLE EMISSION CONTROL INFORMATION	
GROUP: HCRXT03.25P1 NO ADJUSTMENTS NEEDED HO2S / SFI / TWC	EVAP: HCRXR0116PK1	CONFORMS TO REGULATIONS: 2017 MY ENGINE: 3.2L
U.S. EPA: T3 B110 LDT OBD: CA OBD II FUEL: GASOLINE		47480 533AA
CA: OBD: CA OBD II FUEL: GASOLINE This vehicle conforms to federal regulations and is certified for sale in California.		